

**To:** Clements, Mindy[clements.mindy@epa.gov]; Arcaute, Francisco[Arcaute.Francisco@epa.gov]; El-Zein, Jason[el-zein.jason@epa.gov]  
**Cc:** Lall, Partap C. (PC)[lall.partap@epa.gov]  
**From:** Lall, Partap C. (PC)  
**Sent:** Tue 1/14/2014 3:51:21 PM  
**Subject:** Re:Completion of Kraton ER

Reviewed the latest data. Release secured and cleaned up. Airmonitoring all background levels. All liquid discharge going through carbon filters with nondetect concentration of contaminants. Demobing today, will send a writeup for the incident for weekly report.

---

**From:** Clements, Mindy  
**Sent:** Monday, January 13, 2014 5:17:07 PM  
**To:** Arcaute, Francisco; El-Zein, Jason  
**Cc:** Lall, Partap C. (PC)  
**Subject:** Re: Ohio Spill bullet points - any updates?

Hi Cisco,  
Did you see Partap Lall's update from 310 pm today?  
Thank you, Mindy Clements, EPA Region 5 SFD, Chief, Emergency Response Section 2, 312-886-6439 (O), 312-802-2812 (BB)

---

**From:** Arcaute, Francisco  
**Sent:** Monday, January 13, 2014 2:42:44 PM  
**To:** El-Zein, Jason; Clements, Mindy  
**Subject:** Ohio Spill bullet points - any updates?

Reporter would like to know if there are any updates.

Thanks

F

**From:** El-Zein, Jason  
**Sent:** Monday, January 13, 2014 11:01 AM  
**To:** Arcaute, Francisco; Clements, Mindy  
**Subject:** FW: Spill bullet points

Here's the latest. Thanks.

**From:** Mcseveney, Megan  
**Sent:** Monday, January 13, 2014 10:15 AM  
**To:** Ballotti, Doug  
**Cc:** El-Zein, Jason; Borries, Samuel  
**Subject:** Spill bullet points

### Ohio Spill

At the request of Ohio EPA, EPA responded on January 9;

Kraton – a rubber manufacturing facility – had experienced a leak of diethyl ether and cyclohexane;

Kraton has deployed booms into the nearby Davis Creek. Aeration is being used to treat the ethyl ether and a boom to recuperate the cyclohexane;

Kraton is conducting water and air sampling;

There was a second discharge today, which shut down cleanup response for four hours;

Too early to determine the size of the leak;

Too early to determine the cost and duration of the cleanup.

Update:

EPA remained at the site providing oversight all weekend and as of Monday morning remains at the site. We will re-evaluate status of cleanup Monday morning.

EPA is monitoring 3 main areas: an on-site pond, Davis Creek, and the river. Filters have been installed at the outfall to address spill.

Air monitoring continues.

The company has put in place a monitoring process for drinking water. Drinking water was not immediately impacted by the spill as the source is ground water and not river water, however in an abundance of caution bi-weekly monitoring will be put into place.

No new fish or wildlife kills since the initial spill report.

Media coverage is mostly local and Superfund is working with OPA on responses.

**Unrelated to West Virginia spill, but geographically quite close. (approximately a 90 minute drive)**

### West Virginia

**State of Emergency declared on Friday.**

**State activated Regional Response Team which includes several agencies: such as EPA Region 3, Coast Guard, FEMA, and CDC.**

The West Virginia Office of Environmental Health Services (OEHS) **estimates no more than 5,000 gallons of chemical leaked in the Elk River. Based on river flow dilution, officials calculate the chemical concentration in the water to be well below the CDC declared safe level.** However, conditions of the river (ice) and proximity to intake are complicating cleanup. The chemical (4-methycyclohexane methanol) is a flammable solvent used in the coal preparation process and is an irritant to eyes, respiratory system, and skin. The Elk River flows into the Kanawaha River (which flows through Charleston -the state capital) and the spill occurred near the Kanawha Valley Water Treatment Plant. The Kanawha Valley Water Treatment Plant detected the chemical even after the increased carbon treatment effort was put in place.

West Virginia water authorities have issued a “Do Not Use Water Notice” for 10 counties (Kanawha, Boone, Putnam, Lincoln, Logan, Clay, Roane, Jackson Cabell and Wayne). This impacts 300,000 citizens due to estimates and a large percentage of the total state population. West Virginia American Water (WVAW) customers are told not to use tap water for drinking, cooking, washing, or bathing.

On Friday the spill closed schools and state legislature according to media reports.

**Doug- The Kanawaha River does flow into Ohio River and sampling/monitoring of the river is ongoing. EPA does not have any results yet. Do not expect any impact given dilution, however once results are in they will be shared with region 5.**

The State and the West Virginia American Water Company (WVAW) are developing a plan for flushing the affected water treatment system, along with sampling and analysis, that will allow residents to begin using their water as soon as possible - however no date has been set. State and Federal (ATSDR/CDC) health officials have agreed that a level of 1 part per million (ppm) of methylcyclohexanemethanol is protective of public health and the State/WVAW will use the flushing process to assure that the 1 ppm level is achieved throughout the system. The EPA supports this approach and has offered sampling and monitoring assistance to the State during the restart efforts.

**EPA OSCs are onsite and providing technical support and air monitoring support. The odor on the facility property is less than observed yesterday, but could be because of the rain and increased wind speeds. EPA conducted air monitoring earlier and mapped the readings. The difference today between total VOCs is minimally less than yesterday, but again the higher winds may be dispersing the fumes, which could account for the difference.**

The EPA Water Program is working with the utility to investigate treatment options for the chemical, including additional literature research and bench scale studies at other utilities. In addition, EPA's Ft. Meade lab has started looking into lab support for the chemical analysis or finding labs that can provide support through the laboratory response network.

**Local environmental groups have complained to state about lax enforcement of Clean Water Act. May be an NPDES issue...**